

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
Reply to Office Action Mailed August 9, 2007

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. – 21. (Cancelled)
- 1 22. (Currently Amended) The data storage system of claim ~~[[21]] 60~~, wherein the media
2 storage device further comprises a locking plate attached to the device housing and configured to
3 engage a locking mechanism located in the opening in the system housing.
- 1 23. (Cancelled).
- 1 24. (Currently Amended) The data storage system of claim ~~[[21]] 60~~, wherein the housing of
2 the media storage device is molded from plastic.
- 1 25. (Currently Amended) The data storage system of claim ~~[[21]] 60~~, wherein the device
2 housing further comprises a handle configured to enable an operator to apply a force
3 substantially parallel to the ~~first-elongate alignment structure~~ structures such that when the ~~first~~
4 ~~elongate alignment structure engages~~ structures engage the ~~first-elongate reference structure~~
5 structures the media storage device may be inserted and removed from the system housing.
- 1 26. (Cancelled)
- 1 27. (Currently Amended) The data storage system of claim ~~[[21]] 60~~, wherein the spring
2 mechanism has a first end and a second end, the first end being operationally attached to the top
3 of the device housing; and
4 each finger is attached to the second end of the spring mechanism.
- 1 28. (Previously Presented) The data storage system of claim 26, wherein the device housing
2 comprises a plurality of slots defined by a plurality of dividers positioned in spaced-apart relation
3 within the device housing, and wherein the spring mechanism and fingers are configured to
4 engage and secure the corresponding plurality of data media in respective slots.

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
Reply to Office Action Mailed August 9, 2007

29. (Currently Amended) The data storage system of claim ~~[[21]]~~ 60, wherein the spring mechanism comprises a metallic strip.

30. – 42. (Cancelled)

43. (Currently Amended) A data storage system comprising:
a system housing having an opening, and reference structures located adjacent the opening;
a media storage device for storing a plurality of data media, the media storage device comprising a device housing configured to receive the plurality of data media, the device housing having alignment structures, each of which is adapted to slidably engage with a respective one of the reference structures such that the media storage device may be inserted into and removed from the system housing by slidably engaging the reference structures and the alignment structures and guiding the media storage device through the opening of the system housing along a longitudinal axis of the device housing, the data media being inserted into and removed from the device housing along an axis transverse to the longitudinal axis;
a spring mechanism having fingers configured to engage the corresponding plurality of data media to secure the plurality of data media in the device housing;
a drawer to receive the media storage device, the drawer being moveable between a retracted position and an extended position; and
guide rails to enable movement of the drawer between the retracted and extended positions, the guide rails being separate from the reference ~~[[rails]]~~ structures.

44. (Previously Presented) The data storage system of claim 43, wherein the guide rails comprise a first guide rail attached to the drawer, a second guide rail attached to the system housing, and a third guide rail slidably engaged to the first and second guide rails.

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
Reply to Office Action Mailed August 9, 2007

1 45. (Previously Presented) The data storage system of claim 43, wherein engagement of the
2 reference structures and respective alignment structures lifts the media storage device from the
3 drawer.

1 46. (Previously Presented) The data storage system of claim 45, wherein engagement of the
2 reference structures and respective alignment structures when the drawer is in the retracted
3 position determines a position of the media storage device in the data storage system housing
4 instead of the drawer determining the position of the media storage device.

1 47. (Currently Amended) [[A]] The data storage system of claim 60 further comprising:
2 ~~a system housing having an opening, and reference structures located adjacent the~~
3 ~~opening;~~
4 ~~a media storage device for storing a plurality of data media, the media storage device~~
5 ~~comprising a device housing configured to receive the plurality of data media, the device~~
6 ~~housing having alignment structures, each of which is adapted to slidably engage with a~~
7 ~~respective one of the reference structures such that the media storage device may be inserted into~~
8 ~~and removed from the system housing by slidably engaging the reference structures and the~~
9 ~~alignment structures and guiding the media storage device through the opening of the system~~
10 ~~housing along a longitudinal axis of the device housing, the data media being inserted into and~~
11 ~~removed from the device housing along an axis transverse to the longitudinal axis;~~
12 ~~a spring mechanism having fingers configured to engage the corresponding plurality of~~
13 ~~data media to secure the plurality of data media in the device housing;~~
14 ~~a moveable drawer to receive the media storage device; and~~
15 ~~an automated drive system adapted to, in response to user input, move the drawer~~ media
16 exchange device between [[a]] the retracted position [[to an]] and the extended position.

1 48. (Previously Presented) The data storage system of claim 47, wherein the drive system has
2 a motor to cause movement of the drawer.

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
Reply to Office Action Mailed August 9, 2007

49. (Previously Presented) The data storage system of claim 48, wherein the drive system has a drive gear driven by the motor to cause movement of the drawer.

50. (Currently Amended) [[A]] The data storage system of claim 60, wherein the media exchange device comprises a drawer, and comprising:

~~a data storage system housing having an opening, and reference rails located adjacent the opening;~~

~~a media storage device for storing a plurality of data media, the media storage device comprising a media storage device housing configured to receive the plurality of data media, the housing having opposing ends, the media storage device housing having alignment grooves, each of which is adapted to slidably engage with a respective one of the reference rails such that the media storage device may be inserted into and removed from the data storage system housing by slidably engaging the reference rails and the alignment grooves and guiding the media storage device through the opening of the data storage system housing along a longitudinal axis of the media storage device housing, the opposing ends of the media storage device housing being located along the longitudinal axis, the data media being inserted into and removed from the media storage device housing along an axis transverse to the longitudinal axis; and~~

~~a moveable drawer to receive the media storage device, the drawer moveable between a retracted position inside the data storage system housing and an extended position wherein the drawer protrudes from the data storage system housing,~~

~~the drawer further comprising having supplemental slots to store spare data media, the supplemental slots separate from the media storage device.~~

51. (Previously Presented) The data storage system of claim 50, further comprising at least another media storage device for storing a plurality of data media,

wherein the drawer has trays to receive respective media storage devices,

the supplemental slots being separate from the media storage devices.

52. (Previously Presented) The data storage system of claim 43, wherein the drawer and media storage device are an integrated unit.

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
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1 53. (Currently Amended) [[A]] The data storage system comprising of claim 60, wherein the
2 media exchange device comprises a first drawer, and the data storage system further comprises:

3 ~~a data storage system housing having an opening, and reference rails located adjacent the~~
4 ~~opening;~~

5 ~~a media storage device for storing a plurality of data media, the media storage device~~
6 ~~comprising a media storage device housing configured to receive the plurality of data media, the~~
7 ~~housing having opposing ends, the media storage device housing having alignment grooves, each~~
8 ~~of which is adapted to slidably engage with a respective one of the reference rails such that the~~
9 ~~media storage device may be inserted into and removed from the data storage system housing by~~
10 ~~slidably engaging the reference rails and the alignment grooves and guiding the media storage~~
11 ~~device through the opening of the data storage system housing along a longitudinal axis of the~~
12 ~~media storage device housing, the opposing ends of the media storage device housing being~~
13 ~~located along the longitudinal axis, the data media being inserted into and removed from the~~
14 ~~media storage device housing along an axis transverse to the longitudinal axis;~~

15 ~~at least another media storage device for storing a plurality of data media,~~

16 ~~the media storage devices stacked in a vertical stack arrangement; and~~

17 ~~a plurality of at least another moveable drawers drawer to receive respective the at least~~
18 ~~another media storage devices device, each drawer moveable between a retracted position inside~~
19 ~~the data storage system housing and an extended position wherein the drawer protrudes from the~~
20 ~~data storage system housing.~~

1 54. - 59. (Cancelled)

Appl. Serial No. 09/938,159
Amendment Dated October 25, 2007
Reply to Office Action Mailed August 9, 2007

1 60. (Previously Presented) A data storage system comprising:

2 a data storage system housing having an opening and reference structures;

3 a media storage device for storing a plurality of data media devices, the media storage
4 device having a housing with alignment structures to slidably engage the respective reference
5 structures to enable slidable movement of the media storage device through the opening of the
6 data storage system housing;

7 a spring mechanism having plural fingers configured to engage and secure the
8 corresponding plurality of data media in the device housing;

9 a moveable media exchange device to receive the media storage device, the media
10 exchange device moveable between a retracted position and an extended position, wherein the
11 media storage device is positioned inside the data storage system housing when the media
12 exchange device is in the retracted position, and wherein the media storage device protrudes
13 from the data storage system housing when the media exchange device is in the extended
14 position; and

15 guide structures to moveably guide the media exchange device between the retracted and
16 extended positions.

1 61. (Previously Presented) The data storage system of claim 60, wherein the guide structures
2 are separate from the reference structures and alignment structures.

1 62. (Previously Presented) The data storage system of claim 61, wherein the media storage
2 device has a plurality of slots to receive respective data media devices.

1 63. (Currently Amended) The data storage system of claim ~~[[21]]~~ 60, wherein the ~~first and~~
2 ~~second elongate~~ reference structures comprise ~~first and second~~ elongate reference rails, and
3 wherein the ~~first and second elongate~~ alignment structures comprise ~~first and second~~ elongate
4 alignment grooves.

1 64. (Cancelled)

Appln. Serial No. 09/938,159
Amendment Dated October 25, 2007
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1 65. (Currently Amended) The data storage system of claim [[21]] 60, wherein the fingers
2 comprise respective locking elements to secure respective data media.

1 66. (Previously Presented) The data storage system of claim 43, wherein the fingers
2 comprise respective locking elements to secure respective data media.

1 67. (Currently Amended) The data storage system of claim [[50]] 43, wherein the drawer
2 comprises supplemental slots [[are]] defined by one or more slot dividers to receive spare data
3 media, the supplemental slots separate from the media storage device.